

CLAIMS

We claim:

1. A fuel supply containing fuel adapted to be connected to a host device, wherein the fuel supply comprises

5 a front face and at least one functional element, wherein the at least one functional element is positioned relative to a datum defined on the fuel supply,

wherein when the fuel supply is connected to the host device the front face is positioned opposite to a corresponding face on the host device, and the datum matches a matching datum on the host device and the at least one functional element is connected to corresponding

10 connection on the host device.

2. The fuel supply of claim 1, wherein the host device is an electronic device powered by a fuel cell.

15 3. The fuel supply of claim 1, wherein the host device is a fuel cell.

4. The fuel supply of claim 1, wherein the host device is a charger.

5. The fuel supply of claim 1, wherein the at least one functional element is located on the front face.

20 6. The fuel supply of claim 1, wherein the at least one functional element is located on a side of the cartridge.

25 7. The fuel supply of claim 1, wherein the at least one functional element is located on a top of the cartridge.

8. The fuel supply of claim 1, wherein the at least one functional element is located on a bottom of the cartridge.

9. The fuel supply of claim 1, wherein the at least one functional element is located on a back face of the cartridge.
10. The fuel supply of claim 1, wherein the front face is substantially flat.
- 5 11. The fuel supply of claim 1, wherein the front face is curved.
12. The fuel supply of claim 1, wherein the front face comprises non-planar portions.
- 10 13. The fuel supply of claim 12, wherein the at least one functional element is located on one of the non-planar portion.
14. The fuel supply of claim 12, wherein the non-planar portions are parallel.
- 15 15. The fuel supply of claim 12, wherein the non-planar portions are non-parallel.
16. The fuel supply of claim 1, wherein the at least one functional element coincides with the datum.
- 20 17. The fuel supply of claim 1, wherein the datum is located on the front face.
18. The fuel supply of claim 1, wherein the at least one functional element comprises shut-off valve, memory storage device, mechanical connections, electrical connections, pneumatic connections, sensors, locks, latches, fuel filling port, refill valve, orientation features or guides.
- 25 19. The fuel supply of claim 1, wherein the datum comprises a corner datum.
20. The fuel supply of claim 1, wherein the datum comprises a protruding datum.
- 30 21. The fuel supply of claim 1, wherein the datum comprises a width datum.

22. The fuel supply of claim 1, wherein the datum comprises orthogonal datum points.
23. The fuel supply of claim 1, wherein the datum comprises a notch datum.
- 5 24. The fuel supply of claim 23, wherein the notch datum comprises two orthogonal legs.
25. The fuel supply of claim 1, wherein the datum comprises a pin datum.
26. The fuel supply of claim 1, wherein the position of the at least one functioning element
10 is measured from the datum using a Cartesian coordinate.
27. The fuel supply of claim 1, wherein the position of the at least one functioning element
is measured from the datum using a spherical coordinate.
- 15 28. The fuel supply of claim 1, wherein a portion of the front face and a portion of the
corresponding face on the host device are standardized.
29. The fuel supply of claim 1, after the fuel supply is connected to the host device, the fuel
supply forms a part of an exterior surface of the host device.
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30. The fuel supply of claim 1, after the fuel supply is connected to the host device, the fuel
supply does not form a part of an exterior surface of the host device.
31. The fuel supply of claim 1, wherein the datum is selected to correspond to a specific
25 fuel.
32. An adapter for connecting a fuel supply to a host device comprising
at least one first functional element adapted to connect to a corresponding first
connection on the host device, wherein the first functional element is positioned relative to a
30 first datum on the adapter and the first datum matches a first matching datum on the host
device, and

wherein the adapter is connected to the fuel supply, so that fuel from the fuel supply is transportable to the host device.

5 33. The adapter of claim 32, wherein the adapter is connected to the fuel supply by at least one tubing.

34. The adapter of claim 32, wherein the adapter is connected to the fuel supply by a manifold.

10 35. The adapter of claim 32, wherein the adapter is connected to a plurality of fuel supplies, wherein the fuel supplies are in fluid communication with each other.

36. The adapter of claim 32 further comprising
at least one second connection adapted to connect to a corresponding second functional
15 element on the fuel supply so that the fuel supply is functionally connected to the host device, wherein the second functional element is positioned relative to a second datum on the fuel supply, and

wherein the position of the first functional element relative to the first datum is substantially the same as the position of the second functional element relative to the second
20 datum.